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REMARKS

Applicant thanks Examiner Kwok for her careful attention to this application.

The claims have been renumbered in accordance with the Examiner's instructions.

I. Amendment to the Claims

The claims were renumbered by the Examiner and thus do not appear in this document.

The independent claims were amended to add limitations regarding the angular rate filter. The limitation of angular rate filter was in several of the dependent claims such as previous claim 7, 23 and 42

II. Anticipation of Claims 1-12, 17-46 & 50-56

Claims 1-12, 17-46 and 50-56 were rejected as anticipated by Tano et al. (US Patent 6,438,472), Tano (US Patent 6,067,488), Horton (US Patent 6,421,622), Schiffmann (US Patent 6,292,759) or JP9-52569 (Abe).

Claim 1 as amended requires among other things:

an angular rate filter coupled between the angular rate sensor and the processor for allowing only angular rate sensor outputs within a frequency range to reach the processor;

The angular rate filter allows the processor to manipulate only outputs from the angular rate sensor with a specific frequency band. Thus, the processor does not have to process each output from the angular rate sensor, thereby reducing the amount of time the processor is active, and thus reducing the power consumption by the processor.

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Neither Tano et al. (US Patent 6,438,472), Tano (US Patent 6,067,488), Horton (US Patent 6,421,622), Schiffmann (US Patent 6,292,759) nor JP9-52569 (Abe) shows a filter between the processor and the angular rate sensor.

In the Tano et al. patent (the '472 patent), no filter is shown between the angular velocity meters (111x, 111y, 111z) and the preprocessor 131. The text of Tano et al. clearly suggests that the preprocessor makes all determinations whether the recorded events are "events" and thus should be permanently recorded. Col. 7, line to Col. 8, line 24.

The Tano patent (the '488 patent) also does not show any filter between the angular speedometer (10x, 10y, 10z) and the memory control section 12. The memory control section 12 is specifically said to be a processor. Col. 4, lines 59-64. The Horton patent also fails to show a filter between the XYZ gyros (13, 14, 15) and the processor.

The Schiffman patent shows a system for angle estimation. However, no filter is shown between the angular rate sensors (12, 14, 16) and the processor (22). Thus, during operation, the processor shown in Schiffman must process each and every output from the angular rate sensors..

JP 9-52569 also fails to show a filter between the angular velocity sensors (2a, 2b, 2c) and the processor 5. (The device labeled as "3" in the figure is a multiplexer.)

None of the devices show a filter between the angular rate sensor and the processor. As amended, all claims require a filter between the angular rate sensor and the processor. Thus, none of claims 1-58 are anticipated by the above references.

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Additionally, claims 35-46 are not anticipated due to the requirement of a housing. Claim 35 is for a self-contained data recorder where the linear accelerometers, the angular rate sensors, the memory, the processor and the power supply are contained within the housing. However, none of the above reference show such a self-contained data recorder.

Tano et al. (US Patent 6,438,472), Tano (US Patent 6,067,488), Schiffmann (US Patent 6,292,759) and JP9-52569 (Abe) are used within a motor vehicle. The various sensors could be dispersed throughout the motor vehicle. Further, the power supply used to energize the various devices is not shown and thus is not shown within the same housing that includes the accelerometers, angular sensors, and processors.

III. Obviousness of claims 13-16 and 47-49

The Examiner has rejected the claims of the pending application as obvious. The determination of obviousness rests on whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. *Kahn v. General Motors Corp.*, 135 F.3d 1472, 45 USPQ2d 1608 (Fed. Cir. 1998). In determining obviousness, four factors should be weighed: (1) the scope and content of the prior art, (2) the differences between the art and the claims at issue, (3) the level of ordinary skill in the art and (4) secondary considerations that may be present. Among the factors supporting a finding of non-obviousness are satisfaction of a long-felt need, failure of others to find a solution to the problem at hand, and copying of the invention by others. *Pro-mold and Tool Co., Inc. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 37 USPQ2d 1626 (Fed. Cir. 1996)

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In establishing obviousness under section 103, the Examiner carries the burden of presenting a *prima facie* case, *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), and must show that the references relied on teach or suggest all of the limitations of the claims. *In re Wilson*, 424 F.2d 1382, 1385 (C.C.P.A. 1970). Obviousness may not be established using hindsight or in the view of the teachings or suggestions of the inventor. *Para-Ordance Manufacturing, Inc. v. SGS Importers International, Inc.*, 73 F.3d 1085, 37 USPQ2d 1237 (Fed. Cir. 1995), *cert. denied* 117 S. Ct. 80 (1996).

M.P.E.P. 2142 states:

The legal concept of *prima facie* obviousness is a procedural tool of examination which applies broadly to all arts. It allocates who has the burden of going forward with production of evidence in each step of the examination process. See *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Saunders*, 444 F.2d 599, 170 USPQ 213 (CCPA 1971); *In re Tiffin*, 443 F.2d 394, 170 USPQ 88 (CCPA 1971), *amended*, 448 F.2d 791, 171 USPQ 294 (CCPA 1971); *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968). The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness. If, however, the examiner does produce a *prima facie* case, the burden of coming forward with evidence or arguments shifts to the applicant who may submit additional evidence of nonobviousness, such as comparative test data showing that the claimed invention possesses improved properties not expected by the prior art. The initial evaluation of *prima facie* obviousness thus relieves both the examiner and applicant from evaluating evidence beyond the prior art and the evidence in the specification as filed until the art has been shown to suggest the claimed invention.

When determining the differences between the prior art and the claims at issue, it is essential to view the claims at issue as "the invention as a whole" 35 U.S.C. §103. It is legally

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improper to focus on the obviousness of substitutions and differences between the claimed invention and the prior art rather than on the obviousness of the claimed invention as a whole relative to that prior art. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1383, 231 USPQ 81, 93 (Fed. Cir. 1986), *cert denied*, 480 U.S. 947 (1987).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Thus, while obviousness may be found by combining references, absent a suggestion to combine the references, such combination is inappropriate. *Texas Instruments Inc. v. U.S. Int'l Trade Comm'n*, 988 F.2d 1165, 26 USPQ2d 1018 (Fed. Cir. 1993). It is insufficient that the prior art discloses the component of the claims sought to be patented. A teaching, suggestion or incentive to make the combination is required for a combination of the art to demonstrate obviousness. *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 15 USPQ2d 1321 (Fed. Cir. 1990). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). M.P.E.P. 2143.

Claims 13-16 and 47-49 were rejected as obvious under 35 U.S.C. § 103(a) due to either Tano et al. (US Patent 6,438,472), Tano (US Patent 6,067,488), Horton (US Patent 6,421,622), Schiffmann (US Patent 6,292,759) or JP9-52569 (Abe) in view of Hoshal et al. (US Patent 5,754,449).

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As stated previously, Tano et al. (US Patent 6,438,472), Tano (US Patent 6,067,488), Horton (US Patent 6,421,622), Schiffmann (US Patent 6,292,759) and JP9-52569 (Abe) fail to show a filter between the angular rate sensor and the processor. The Hoshal et al. reference (US Patent 5,754,449) does not show an angular rate sensor. Thus, if one were to combine Hoshal et al with any of the previously cited references, the new device would not have all the elements of the claimed invention. Thus, the references do not render the claimed invention obvious.

There is also no suggestion to combine the references. Tano et al. (US Patent 6,438,472), Tano (US Patent 6,067,488), Horton (US Patent 6,421,622), Schiffmann (US Patent 6,292,759) and JP9-52569 (Abe) are devices designed to measure every output of the angular rate sensor and linear accelerometer. The processor then determines which of the outputs should be stored for later time. The processor must perform continuous analysis of the outputs. This requires a sophisticated processor and extra energy to operate the processor.

The device shown in Hoshal et al., on the other hand, is a self-contained unit with a power supply located within the unit. Thus, combining Hoshal et al. with the other references is not obvious.

CONCLUSION

In conclusion, the subject application is now in condition for allowance and an action acknowledging the same is respectfully requested. If after reviewing this Amendment, should the Examiner have questions or require additional information, the Examiner is cordially

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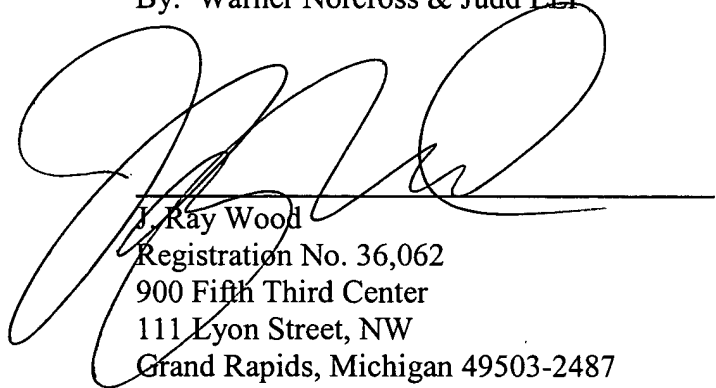
invited to call the undersigned attorney so this case may receive an early Notice of Allowance.

Such action is earnestly solicited.

Respectfully submitted,

GREGORY D. HOSHAL

By: Warner Norcross & Judd LLP



J. Ray Wood
Registration No. 36,062
900 Fifth Third Center
111 Lyon Street, NW
Grand Rapids, Michigan 49503-2487
(616) 752-2167

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DRAWINGS

Please amend Fig. 2 as shown in red at Exhibit A. A clean replacement sheet of Fig. 2 is at Exhibit B.

